Terminal Aerodrome Forecasts (TAF)

A TAF is a report established for the five statute mile radius around an airport. TAF reports are usually given for larger airports. Each TAF is valid for a 24 or 30-hour time period and is updated four times a day at 0000Z, 0600Z, 1200Z, and 1800Z. The TAF utilizes the same descriptors and abbreviations as used in the METAR report. The TAF includes the following information in sequential order:

1. Type of report—a TAF can be either a routine forecast (TAF) or an amended forecast (TAF AMD).

2. ICAO station identifier—the station identifier is the same as that used in a METAR.

3. Date and time of origin—time and date (081125Z) of TAF origination is given in the six-number code with the first two being the date, the last four being the time. Time is always given in UTC as denoted by the Z following the time block.

4. Valid period dates and times—The TAF valid period (0812/0912) follows the date/time of forecast origin group. Scheduled 24 and 30 hour TAFs are issued four times per day, at 0000, 0600, 1200, and 1800Z. The first two digits (08) are the day of the month for the start of the TAF. The next two digits (12) are the starting hour (UTC). 09 is the day of the month for the end of the TAF, and the last two digits (12) are the ending hour (UTC) of the valid period. A forecast period that begins at midnight UTC is annotated as 00. If the end time of a valid period is at midnight UTC, it is annotated as 24. For example, a 00Z TAF issued on the 9th of the month and valid for 24 hours would have a valid period of 0900/0924.

5. Forecast wind—the wind direction and speed forecast are coded in a five-digit number group. An example would be 15011KT. The first three digits indicate the direction of the wind in reference to true north. The last two digits state the windspeed in knots appended with “KT.” Like the METAR, winds greater than 99 knots are given in three digits.

6. Forecast visibility—given in statute miles and may be in whole numbers or fractions. If the forecast is greater than six miles, it is coded as “P6SM.”

7. Forecast significant weather—weather phenomena are coded in the TAF reports in the same format as the METAR.

8. Forecast sky condition—given in the same format as the METAR. Only cumulonimbus (CB) clouds are forecast in this portion of the TAF report as opposed to CBs and towering cumulus in the METAR.

9. Forecast change group—for any significant weather change forecast to occur during the TAF time period, the expected conditions and time period are included in this group. This information may be shown as from (FM), and temporary (TEMPO). “FM” is used when a

rapid and significant change, usually within an hour, is expected. “TEMPO” is used for temporary fluctuations of weather, expected to last less than 1 hour.

10. PROB30—a given percentage that describes the probability of thunderstorms and precipitation occurring in the coming hours. This forecast is not used for the first 6 hours of the 24-hour forecast.

TAF Example:

1. KPIT 091730Z 0918/1024 15005KT 5SM HZ FEW020 WS010/31022KT
2. FM091930 30015G25KT 3SM SHRA OVC015
3. TEMPO 0920/0922 1/2SM +TSRA OVC008CB
4. FM100100 27008KT 5SM SHRA BKN020 OVC040
5. PROB30 1004/1007 1SM -RA BR
6. FM101015 18005KT 6SM -SHRA OVC020
7. BECMG 1013/1015 P6SM NSW SKC

1. KPIT airport identifier, date and time, validity period (09 18Z to 10 24Z), wind direction, visibility, HZ- significant weather, sky conditions (FEW at 2000'), WS (wind shear) at 1000' AGL 310 Deg at 22KT.

2. From 09/1930Z wind direction and speed (300 Deg 15KT, gusting 25KT), visibility (3 statute miles), showers and rain, overcast at 800'.

3. Temporarily from 09 2000Z to 09 2200Z ½ statute mile visibility with heavy thunderstorms and rain, overcast at 800'.

4. From 10 0100Z, wind (270 at 8KT), visibility (5SM), showers and rain, sky conditions.

5. Probability of 0-30%, 10 0400Z to 0700Z visibility rain and mist.

6. From 10 1015Z wind (180 at 5KT), visibility, light showers and rain, overcast 2000'.

7. Becoming 10 1300Z to 10 1500Z, greater than 6SM, NSW (no significant weather), sky clear.

Key Words	**What's reported**
VCTS- Vicinity	Location
PROB- Probability	Date and time
PROB30- 0-30% probability	Validity report
PROB40- 40-50% probability	Wind
TEMPO- Temporarily	Visibility
FM- From, always includes the day and time	Weather
BECMG- Becoming	Cloud
NSW- No significant weather	Significant changes

TAF Codes

- Light
Moderate (no qualifier)
+ Heavy or well-developed
VC in the Vicinity

MI Shallow
BC Patches
DR Low Drifting
BL Blowing
SH Showers
TS Thunderstorm
FZ Freezing
PR Partial
Precipitation

DZ Drizzle
RA Rain
SN Snow
SG Snow Grains
IC Ice Crystals
PL Ice Pellets
GR Hail
GS Small Hail or Snow Pellets (less than 1/4 inch in diameter)
UP Unknown precipitation (automated stations only)

BR Mist (Foggy conditions with visibilities greater than 5/8 statute mile)
FG Fog (visibility 5/8 statute mile or less)
FU Smoke
DU Dust
SA Sand
HZ Haze
PY Spray
VA Volcanic Ash

PO Well-Developed Dust/Sand Whirls
SQ Squalls
FC Funnel Cloud
+FC Well-Developed Funnel Cloud, Tornado or Waterspout
SS Sandstorm
DS Duststorm